

.

Class Specifications
for the Class:

HEAVY VEHICLE/CONSTRUCTION EQUIPMENT MECHANIC I
(HEAVY VEH/CONSTR EQUIP MECH I)

Duties Summary:

Repairs and overhauls a variety of heavy vehicles and/or construction equipment as a substantially full-time assignment; and performs other related duties as assigned.

Distinguishing Characteristics:

This class reflects responsibility for the performance of skilled, journey-level work in the repair, maintenance and overhaul of a variety of heavy vehicles and/or construction equipment as a substantially full-time assignment. A position in this class may also modify vehicles and equipment and fabricate parts and equipment, as necessary, in order to meet the needs of the organization and its program requirements.

In addition to working on a variety of heavy vehicles and/or construction equipment, positions in this class also perform work involving the repair and overhaul of a variety of other automotive equipment and may supervise the work of helpers or another mechanic.

Examples of Duties:

Diagnoses engine, drive train, electrical, hydraulic and other mechanical failures using engine analyzers, visual and/or audible indicators; disassembles engines; inspects, removes, repairs and replaces engine parts; repairs and overhauls transmissions, differentials, brakes, clutches, dump hoists, electrical systems, cooling systems, water handling apparatus on pumper units, steering units, etc.; repairs various specialized parts of equipment; performs road tests/work tests of all vehicles and equipment overhauled and repaired; performs welding in connection with repair work; uses various analyzing equipment to check on operating condition and to diagnose problems; performs oil change and lubrication; repairs rust spots, dents and scratches and paints vehicle bodies as necessary; determines parts and material requirements; may participate in the planning and implementation of a preventative maintenance schedule for each vehicle and equipment; designs, modifies and fabricates parts and equipment as required; and may supervise another mechanic or helpers.

Knowledge and Abilities Required:

Knowledge of: Theory and principles of the internal combustion engine, electrical systems, and drive train systems; principles of complex hydraulic systems; tools, machines, materials and practices used in the repair and overhaul of automotive equipment including heavy vehicles and/or construction equipment and appurtenant mechanical, hydraulic and electrical units; operation of heavy vehicles and/or various construction equipment sufficient to conduct road tests; and hazards and safety practices applicable to the trade.

Ability to: Diagnose and correct mechanical defects in gasoline and diesel-driven motorized equipment; repair and overhaul a variety of heavy vehicle and/or construction equipment and their various specialized mechanical, hydraulic and electrical units; use appropriate tools and testing equipment; estimate material, parts and labor necessary to perform a job; read and interpret various manufacturers' manuals in performing work; read schematic wiring and hydraulic flow diagrams; make working sketches and drawings; do welding and simple sheet metal work; perform heavy manual work and lifting; work with dexterity and safety; operate heavy vehicles and/or construction equipment; give and receive oral and written instructions; and may require the ability to design, adapt, modify and fabricate parts and equipment.

This is the first specification for the new class HEAVY VEHICLE/CONSTRUCTION EQUIPMENT MECHANIC I (HEAVY VEH/CONSTR EQUIP MECH I).

Effective Date: 2/16/90

DATE APPROVED: 3/30/92

SHARON Y. MIYASHIRO
Director of Personnel Services